

## REMARKS

In the Final Official Action dated January 22, 2007, Claims 1-41 and 43-46 are pending. Claims 1-30, 37, 43 and 46 are withdrawn from consideration. Claims 31-36, 38-41 and 44-45 have been considered on the merits. Claims 31-36 and 38-39 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Shao et al. (*J. Mol. Biology* 285: 755-73 (1999); hereinafter "Shao"). Claims 31-36, 38-41, 44 and 45 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Brenner (*D.E. Brenner et al. Neurology* 43: 293-300, 1993, hereinafter "Brenner"), as evidenced by Shao et al..

This Response addresses each of the Examiner's rejections. Applicants therefore respectfully submit that the present application is in condition for allowance. Favorable consideration of all pending claims is therefore respectfully requested.

In the first instance, Applicants, through the undersigned, thank Examiner Andrew D. Kosar for the courtesy and assistance extended to Applicants during a telephone interview conducted on March 27, 2007.

In light of the discussion with the Examiner in the telephone interview and in an effort to favorably advance prosecution, Applicants have amended Claims 31 and 41 by incorporating the delineation of Claim 46. Claim 46 is therefore canceled without prejudice. No new matter is introduced by the foregoing amendment. Applicants reserve the right to file a continuation application to pursue the subject matter of Claims 31 and 41 as originally filed.

Claims 31-36 and 38-39 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Shao et al. (*J. Mol. Biology* 285: 755-73 (1999); hereinafter "Shao"). According to the Examiner, Shao teaches that the NMR work established that nicotine binds to the His13 and His14 side-chains of the Tyr10-Val24  $\alpha$ -helix, and this binding prevented an  $\alpha$ -helix to  $\beta$ -sheet conversion and  $\beta$ -amyloid precipitation. The Examiner contends that in conducting the NMR,

one is inherently practicing the claimed method, as binding of nicotine to  $\beta$ -amyloid protein at His13 and His14 inherently "blocks" the N-terminus in such a way that binding of metal ions at said His residue(s) is inhibited. The Examiner alleges that because nicotine meets the requisite structural characteristics of Claim 31, it necessarily must possess the same function, e.g., binding to specific sites on the A $\beta$  protein, to effect specific inhibition of various cations.

Applicants respectfully submit that Claim 31, as amended, defines the compound to be a metal complex. In this regard, Applicants submit that nicotine is known to be an alkaloid found in plants, and is not a metal complex. Applicants respectfully submit that Shao does not teach exposing a  $\beta$ -amyloid peptide to a metal complex compound, as presently recited in claim 31.

Accordingly, Applicants respectfully submit that the rejection of Claims 31-36 and 38-39 under 35 U.S.C. §102(b) as allegedly anticipated by Shao is overcome. Withdrawal of the rejection is respectfully requested.

Claims 31-36, 38-41, 44 and 45 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Brenner (*D.E. Brenner et al. Neurology* 43: 293-300, 1993, hereinafter "Brenner") as evidenced by Shao.

The Examiner alleges that Brenner teaches subcutaneous injection of nicotine to Alzheimer's disease patients, which improved attention and information processing. The Examiner alleges that Brenner teaches treating a patient with Alzheimer's disease. The Examiner contends that subcutaneous injection of nicotine to a human necessarily requires a pharmaceutically acceptable carrier. Moreover, the Examiner contends that Shao teaches inhibition of amyloidosis by nicotine.

Applicants respectfully submit that Claims 31 and 41, as amended, define the compound that inhibits amyloidosis to be a metal complex. As discussed above, Applicants submit that nicotine is not a metal complex. Applicants respectfully submit that neither Brenner nor Shao teaches the presently claimed methods which employ a metal complex compound.

Accordingly, Applicants respectfully submit that the rejection of Claims 31-36, 38-41, 44 and 45 under 35 U.S.C. §102(b) as allegedly anticipated by Brenner, as evidenced by Shao, is overcome. Withdrawal of the rejection is respectfully requested.

In view of foregoing amendments and remarks, it is firmly believed that the subject application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,



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